

**THE IMPACT OF FOREIGN EXCHANGE RATE DEPRECIATION ON EXPORT
PERFORMANCES AND ITS MACROECONOMIC REPRECUSIONS:**

THE CASE OF ETHIOPIA

By

YISEHAK TEKA NIBERE

Submitted to

KDI School of Public Policy and Management

in partial fulfillment of the requirements

for the degree of

MASTER OF DEVELOPMENT POLICY

Spring, 2016

**THE IMPACT OF FOREIGN EXCHANGE RATE DEPRECIATION ON EXPORT
PERFORMANCES AND ITS MACROECONOMIC REPRECUSIONS:**

THE CASE OF ETHIOPIA

By

YISEHAK TEKA NIBERE

Submitted to

KDI School of Public Policy and Management

in partial fulfillment of the requirements

for the degree of

MASTER OF DEVELOPMENT POLICY

Spring, 2016

Professor Lee, Jinsoo

**THE IMPACT OF FOREIGN EXCHANGE RATE DEPRECIATION ON EXPORT
PERFORMANCES AND ITS MACROECONOMIC REPRECUSION:**

THE CASE OF ETHIOPIA

By

YISEHAK TEKA NIBERE

Submitted to

KDI School of Public Policy and Management

in partial fulfillment of the requirements

for the degree of

MASTER OF DEVELOPMENT POLICY

The Committee in charge:

Professor: Lee, Jinsoo



Professor: Sohn, Wook



Professor: Cho, Dongchul



Approval as of spring, 2016

EXECUTIVE SUMMARY

IMPACT OF FOREIGN EXCHANGE RATE DEPRECIATION ON EXPORT PERFORMANCES AND ITS MACROECONOMIC REPRECUSION:

THE CASE OF ETHIOPIA

By

YISEHAK TEKA NIBERE

The objectives of the study are to look at the positive impact of foreign exchange depreciations on export performance without affecting foreign exchange stability and its other macroeconomic repercussions on Ethiopian economy. And come up with alternative policy options in order to enhance export performance of the country without affecting foreign exchange rate stability as well as managing macrocosmic repercussions of exchange rate depreciations properly. The study finds out real effective exchange rate of Ethiopian currency is overvalued. Gradually depreciation of the local currency value was resulting in an increase of export values hand on hand. However, its impact on external debt amount and debt services has been simultaneous to the extent of deprecation units.

Since Ethiopian export items market are both price and income inelastic as the exports are dominated by agricultural commodities, the lion share accounted by coffee, local currency depreciation's impact on export performance is not propounding. This is because Ethiopia's total production and productivity is by far low than competitors in order to get price competitiveness that results from local currency depreciations. Besides, depreciating local currency does not discourage import as majority of import items are either capital goods which are not locally produced or basic necessity of goods that have excess demand. Hence, local currency depreciations end up aggravation the prevalent double digit inflation.

The study recommends, in order bringing fundamental change on export performance, working on policies and strategies that bring an increase in total production and productivity are key areas to deal with in the long run. Moreover, produce domestically light machineries and substituting imported raw materials locally as well as mitigating domestic supply constraints of basic necessity goods are very critical policy issue.

ACKNOWLEDGEMENTS

First and foremost, I am grateful to KDIS faculty to enlighten me from their blended knowledge of academics and practices in particular and the whole school community for unreserved support extended to me throughout my stay at School. It is unfair not acknowledge and thanks the hospitality as well as generosity I have been receiving from all Koreans I came across.

I would like also to thank my family for invaluable support and encouragement extended to me day after day. Particularly, I really owe to my wife for your patience and tolerating loneliness while I was studying abroad. Beside, Eng. Senay Teka deserves thanks to support my wife and daughter financial as well as being with them in difficult times.

I also like to thank Mr. Engidawork Zelew for his invaluable supports and binding me to duty to finish with deadline. Last but not the least, I express my indebtedness to National Bank of Ethiopia Management for granting me permission to attend the study program abroad and all other staff of the Bank who supported me by providing the necessary documents and data.

Table of Contents

ACKNOWLEDGEMENTS	iv
Table of Contents.....	v
List of Tables.....	vii
List of Graphs	viii
Acronyms	ix
1. INTRODUCTION.....	1
1.1 History of the Policy Challenges	1
1.2 Background of the Policy Problem	3
1.3 Statement of the Problem	5
1.4 Research Questions	5
1.5 Objective of the Study	6
1.6 Scope and Limitation of the Study	6
1.7 Organization of the Study.....	7
2. DOCUMENT AND LITERATURE REVIEW	7
2.1 Theoretical Literature Review	7
2.2 Document and Empirical Literature Review	9
2.2.1 Empirical Studies in Asia	10
2.2.2 Empirical Studies in Africa	10
2.2.3 Empirical Studies in Ethiopia	11
2.2.4 Empirical Studies in other Developing Countries	12
2.2.5 Document Review	13

3. ANALYSIS AND FINDINGS	14
3.1 Ethiopian Exchange Rates and Exchange Rate Regimes	14
3.2 Overview of Ethiopian International Trade.....	16
3.2.1 Trend of Effective Exchange Rate	16
3.2.2 Major Export Items Production and Productivities	17
3.2.3 External Debt and Exchange Rate Depreciation.....	18
3.2.4 Inflation and Exchange Rate Depreciation	19
3.2.5 Price and Income Elasticity of Ethiopian Export.....	20
3.2.6 Overview of Export and Import	23
3.2.7 Export Items Composition.....	23
3.2.8 Export Destination Countries.....	24
3.2.9 Import Items Compositions and Import Content of Export.....	25
3.2.10 Exchange Rate and Export Values Trend.....	26
4. POLICY RECOMMODATIONS	28
REFERENCES.....	오류! 책갈피가 정의되어 있지 않습니다.

List of Tables

Table-1: Ethiopian Exchange Rate by Period, Regime, Economic Policy

Table-2: Production and Productivity Comparison of Major Export Items

Graph -3: Relationship between Export and Real Effective Exchange Rate

Table 4: Total External Debt

Table-5: External Debt to GDP

Table-6: Correlation between Retail Prices and Coffee Per Capita Consumption in Some Importing Countries

Table-7: Coffee Consumption Per Capita Disappearance for Some Export Destination Countries

Table-8: Coffee Per Capita Consumption Changes in Some Importing Countries

Table-9: Export Items compositions and Their Percentage Shares as of 30 June 2014

Table-10: Export Destination Countries and Their Percentage Shares as of 30 June 2014

Table-11: Import Items compositions and Their Percentage Shares as of 30 June 2014

List of Graphs

Graph-1: Relationship between Export and Real Effective Exchange Rate

Graph 2: Annual % Change of Inflation

Graph 3: Official Exchange Rate Growth

Graph 4: Nominal Export Growth

Acronyms

ETB- Ethiopian Birr

FAOSTAT- Food and Agriculture Organization Statistics

GDP- Gross Domestic Product

GTP- Growth and Transformation Plan

ICO- International Coffee Organization

IMF- International Monetary Fund

NBE- National Bank of Ethiopia

UN WESS- United Nations World Economic and Social Survey

UNCTAD-United Nations Conference on Trade and Development

USD- United States Dollar

WBG- World Bank Group

GTP-Growth and Transformation Plan

1. INTRODUCTION

1.1 History of the Policy Challenges

Recently, the Ethiopia government has prepared the second five year Growth and Transformation Plan(GTP II) to be implemented from year 2015/16 to 2020/21. This overall socio-economic plan targets on major macro-economic goals. In this plan, stable monetary policy is key part whereby stable foreign exchange rate is the pillar among them. The central bank of the country, namely, National Bank of Ethiopia (NBE), is responsible agency to bring monetary stability by bringing stable foreign exchange rate apart from managing money in circulation. It is of the opinion that the cost of substantial depreciation of local currency (LCU) outweighs its benefits of enhancing export performance.

On the other hand, International Monetary Fund (IMF) and World Bank Group (WBG) state in their various reports and studies that Ethiopian LCU is overvalued and hence affecting negatively its international competitiveness.

The first Growth and Transformation Plan (GTP) (2010/11-2014/15) designed to transform the country's economy from agricultural-based to industrial-based economy. The plan period target was to grow export value on an average annually by 19.7% (GTP Official Document, November2010). Thus, the performance of the export sector was expected to play major role in the economy. The performance of the plan indicated that export sector has underperformed the target due to various reasons. Among the reasons, overvaluation of the Ethiopian Birr (ETB) currency and its shortage claimed to be critical problems.

WBG studies recommended Ethiopia to devalue its currency so as to boost the export revenues and achieve the series GTP plans. On the other hand, the government contended that it would look at the overall impact on the economy whether to depreciate the currency or not. And there is ambiguity on the exact impact of depreciation of the currency despite it is assumed that it will benefit the export sector. (<http://www.bloomberg.com>)

Theories and various empirical studies show that when demand is elastic and one country depreciates its currency, prices of goods produced domestically decline vis-a-vis international prices of goods produced abroad. This makes exporting industries more competitive and encourages exports. As a result, export volumes increase considerably resulting in the growth of production and employment. Eventually, the whole economy will be accelerated. Due to this reason, some countries depreciate their currencies to foster their economic growth in general and to increase export earnings in particular.

On the other hand, depreciating a country's currency does not necessarily bring an economic growth but rather the economy may go into a poor performance. In order for depreciation of currency to result in an economic expansion there are factors to take into account.

The first and foremost factor is the amount of raw materials and intermediate goods the country imports and uses in processing of final export goods. If it is large, the cost of production increases due to the high price of input materials for export goods as the currency depreciates, and the country will not be more competitive since relative prices of goods produced for export domestically do not decrease as compared to similar goods produced abroad. The second factor is the types of goods a country imports and their price elasticity. If a country imports essential goods like food, fuels and capital goods which are necessary for

export industry, currency depreciation may result in high inflation. The prices of these goods may increase while people cannot stop buying them. High inflation will create macroeconomic instability and non-conductive business environment which slow down the economic activities.

The other important factor is the country's international debt borrowed in foreign currencies but dominated in domestic currency. If it is large, when the domestic currency depreciates, its value automatically increases which makes difficult for the government to payback the principals and service the debt and hence bring adverse impact in the economy. In the worst scenario, it will end up as debt crisis. (<http://www.theglobaleconomy.com>)

However, there are many scholar findings that well designed and appropriate foreign exchange rates manipulation contributes a lot to enhance external competitiveness of a country, improve performance of import-competing industries and help to get adequate remittances and improve earnings from service sectors especially income earned from tourism industry. Thus, proper management of the foreign exchange depreciation has paramount importance for export sector in particular and the economy in general.

The ambiguity arises due to the fact that Ethiopia's majority export items are primary products for which world demand is inelastic. The manufactured goods exported would use mainly imported raw materials and intermediate goods which raise the cost of export.

1.2 Background of the Policy Problem

The foreign exchange theory states that foreign exchange rate depreciation boost export growth. This is because when foreign exchange rate of once country depreciates that country's export

items can be more competitive in prices in the international market. As a result, export values grow and improve the export performance of that country.

Nevertheless, many empirical studies come up with the argument that the above premises are not universally true. This can be witnessed the aforementioned theory could not be fully applied on developing countries like Ethiopia. The major arguments and empirical findings against the mainstream economics are related to price and income elasticity of export items, import contents of export items, imported goods price inelasticity, domestic inflation and external debt.

Developing countries such as Ethiopia export agricultural commodities, minerals and raw materials which are price inelastic and income inelastic. Besides, the export items have import contents which increase export input costs and imported items are majorly capital goods and food items which are price inelastic. For those developing countries that have large debt denominated in dollar and inflation is a big challenge, exchange rate depreciation has macroeconomic repercussions that outweigh the benefits which cannot be harnessed from export growth performance.

The major objective of this study is to look at the impact of foreign exchange depreciation on export growth performance as well as its macroeconomic repercussions in Ethiopia. The study will assess the impact of the real effective exchange rate on export values of the country by analyzing various reports and documents. In addition to this, the study examines the policy implication of the results and recommends plausible policy options in order to enhance the export sector performance enhancement as well as examine alternative policy options to bring boosted long term export performances without being offset by other macroeconomic repercussions.

1.3 Statement of the Problem

The real effective exchange rate of Ethiopia has been devalued significantly plenty of times since 1992 to enhance external competitiveness of the country while has been allowed gradually to move up and down marginally in between. However, there are experts in the area that argue devaluation of the currency rather than improving the export performance of the country it would result in higher inflation by increasing prices of imported goods. This is due to the fact that the country is in trade deficit for many years and it exports mainly primary agricultural products which are characterized by low price and income elasticities.

Thus, the main task of this study is to find out positive impact of the foreign exchange depreciation on the performance of the export sector in Ethiopia. Besides, it examines the macroeconomic repercussions of foreign exchange rate depreciations on external debt services and price of imported goods. Moreover, it examines the challenges of foreign exchange rate stability while supporting export performance by keeping the local currency value at optimal level.

1.4 Research Questions

The study will address the following key questions on exchange rate depreciations, export performance and other macroeconomic repercussions.

- i. Does exchange rate depreciation affect positively export performance of Ethiopia where the export is dominated by agriculture commodities?
- ii. If so, what is the impact of the Ethiopian currency (ETB) depreciation on export values of the country?
- iii. Does this impact offset by other macroeconomic repercussions of exchange rates depreciations such as increase of external debt level and its service, rise in price of imported goods, failure to discourage import due to the composition of import items?

- iv. What are the challenges of foreign exchange rate stability while supporting export performance by keeping the local currency value at optimal level?

1.5 Objective of the Study

The general objective of the study will be to assess the impact of exchange rate depreciation on performance of export sector in Ethiopia and come up with policy recommendations to enhance the external competitive. Meanwhile, it examines challenge of exchange rate stability while supporting export performance by keeping the local currency value at optimal level. In addition, it would serve as a reference for further study in the area for anyone interested in the topic.

The specific objectives of the study will be to assess the effect of the exchange rate devaluation on export performance and identify alternative policy choices to enhance export performance. Besides, it will indicate areas which need further research to have solid and full-fledged policy guidance on effect of exchange rate depreciation on external competitiveness.

1.6 Scope and Limitation of the Study

The scope of this study is to evaluate the impact of exchange rate depreciation on export performance and its macrocosmic repercussions. It is limited in a sense that it doesn't cover what determines exchange rates and the causes of the depreciations. Besides, it does not include foreign currencies earned from remittances and tourism sector.

1.7 Organization of the Study

This paper is organized as follows. The first chapter presents the introduction part. The second chapter discusses related document and empirical literature review. The third and fourth chapters are analysis and findings and policy recommendations, respectively.

2. DOCUMENT AND LITERATURE REVIEW

2.1 Theoretical Literature Review

Exchange rate is the price of domestic currency of one country or currency union countries currency against foreign currency or currency union countries currency. It can be quoted directly or indirectly by dividing the domestic currency units against foreign currency units or vice versa, in that order. Exchange rate depreciation means decreasing the value of domestic currency in relation to the foreign currencies in managed or freely floating exchange rate regimes.

On the other hand, exchange rate devaluation is officially decreasing the value of domestic currency against exchanged foreign currencies in fixed exchange rate regimes. Exchange rate appreciation is increasing of value of domestic currency in reference to other foreign currencies both in freely or managed floating and fixed exchange rate system. Similarly, exchange rate is called strong and weak when the value of local currencies vis-à-vis other foreign currencies increases and decreases in values in both system, respectively.

Nominal exchange rate is the amount of units of domestic currency exchanged for a unit of any foreign currency. Real exchange rate is the ratio found by multiplying domestic currency nominal exchange rate with the domestic price level and dividing by abroad the price level. It

indicates that the real price of foreign goods and services exchanged for domestic goods and services.

Real exchange rates measures the number of local goods and services exchanged for a unit of foreign goods and services. Real effective exchange rate is an index for one's country currency vis-à-vis the weighted average of trading partners' currencies by taking into account inflation.

There is theoretical foundation that currency depreciation of one's country against foreign country makes its export cheaper and its import more expensive assuming that demand is price elastic both for export and import, *ceteris paribus*. Conversely, the currency appreciation would result in opposite outcomes. This is due to expenditure switching of both home and foreign consumers from purchases of foreign goods to domestic goods as real exchange rate rises (a real depreciation) which is major factor to determine level of export and import in one's country (Feenstra et al. 2012).

The Keynesian economics of "easy money" also implies currency devaluations and supports the argument that currency devaluation improves export performance as well as discourages import so as to enhance import-competing sectors performance.

Nevertheless, there are arguments against this theory such as Marshal-Lerner condition and J-curve effect. Marshal-Lerner condition can be explained if export and import volumes are sufficiently elastic with regard to real exchange rate, real currency depreciation boosts balance of current account if it is initial zero, *ceteris paribus*. That is the sum of relative price of elasticity of export and import demands should exceed 1 for a real currency depreciation to

cause surplus of current account (Krugman et al., 2012). This implies that to improve the export performance and/or discourage import so as to improve balance of current account, the export and import volumes should be sufficiently elastic.

This may not hold necessarily true especially for developing countries like Ethiopia where demand for import goods is inelastic as many studies witnesses since they import essential goods such as oils, foods and capital goods where import demand is inelastic. Thus, real currency depreciation may not increase export volumes to offset import volume increases or not lower import to improve balance of current account since import demand is inelastic in these developing countries. Even, it is unlikely to hold true in developed countries in short run (Ibid.).

J-curve effect argument is that a nominal currency depreciation causes a real currency depreciations and increases the price of imports compared to exports so that decreases imports and increases exports work poor in practice or works after some time like up to one year. This is because there is pass-through for nominal exchange rate to cause real exchange rate. Thus, in the very short run, depreciation may not increase spending in home country's goods (Feenstra et al. 2012).

2.2 Document and Empirical Literature Review

Similar to theoretical arguments, different studies have been made so far by many scholars in various countries and regions and arrived at mixed results on the effect of exchange rate on export performance. There are plenty of quantitative studies that indicated exchange rate has positive impact on export performance of a country. On the other hand, there are empirical findings that shows either its impact is insignificant or has no impact at all.

2.2.1 Empirical Studies in Asia

According to Cheung and Sengupta (2011) empirical findings, real effective exchange rate appreciation has a strong negative impact on Indian non-financial sector firm's shares of export for the period covering from 2000 to 2010. As per empirical study made by Francis and Pasquale (1998), exchange rate effects strongly explain the growth of manufacture exports in Singapore while it has lesser explanatory power in South Korea's manufacture export growths.

In one study made on secondary data between 1981 to 2011 in Pakistan found out exchange rate has positive and statistically significant impact on export performance(Nadeem et al. 2012).

2.2.2 Empirical Studies in Africa

Applying panel co-integration analysis on Sub-Saharan Africa(SSA) countries, Alege and Osabuohien (2011) come up with a result that changes in exchange rate have not affected export and import in these countries. Besides, Makolle (2013) in his empirical analysis on determinants of export trade in Cameroon for the period between 1970 and 2008 pointed out that foreign exchange rate and export trade have significant negative correlation.

Furthermore, Nimrod (2009) in his empirical analysis on determinants of export growth in Uganda for the period 1987 to 2006 showed that real exchange rate is not statistically significant in explaining export growth of the country.

2.2.3 Empirical Studies in Ethiopia

Based on empirical study by World Bank Group (2014), depreciating real exchange rate has positive impact on Ethiopia's export performance. The group projected that ten percent lowering real exchange rate could bring export growth by more than five percentage points per year and increase economic growth by more than two percentage points.

Borena (2013) also made empirical analysis on the data from 1971 to 2011 and concluded that exchange rate depreciation has positive effect on trade balance in Ethiopia. Similarly, Kidane (1994), on his comparative study of Ethiopia, Kenya and Sudan found out that foreign exchange rate depreciation could result in increased export volumes, ratio of tradable to non-tradable prices, decreased ratios of import to export and budgetary deficit to GDP.

Lakew(2003) identified that in the long-run Ethiopia's export performance is significantly determined by real exchange rate. Borena (2009) examined the response of export for exchange depreciations in Ethiopia and the result showed that real effective exchange rate is negatively correlated with export performance.

Likewise, Melesse(2011) using data covering the period from 1981 to 2009 concluded that real exchange rate's coefficient was insignificant indicating that real Ethiopia's currency devaluation or overvaluation has no visible results to determine export performance. Menji (2010), covering the period from 1981 to 2004 and using analysis of trend & co-integration, arrived at the influence of effective real exchange rate in export performance of Ethiopia was insignificant.

2.2.4 Empirical Studies in other Developing Countries

By investigating 92 export surge incidents spanning from 1986 to 2000, Caroline and Pierola (2011) revealed that large real currency depreciation results in export surges in developing countries by reallocation of resources to export industry which attract new entrants and new markets while it is less noticeable in developed countries.

Contrary to the above empirical studies, there are other studies which show that exchange rate has no significant impact on determining export performance. Colacelli (2008) examined the response of export to depreciation or appreciation of real exchange rate in 136 countries where 34 countries were high-income countries while 102 countries were developing. He pointed out that in high income countries export responses more for real depreciations of exchange rates than in developing countries. He also found out elasticity of differentiated sectors is larger than homogenous sectors.

Nilsson et al.(2000) studied 100 developing countries exporting to EU, Japan and USA from 1983 to 1992 identified the impact of exchange rate regimes on their export performances. They found that the countries with more flexible exchange rate regimes perform well but the overall impact of real exchange rate over-or under-valuations have negative impact on exports.

Developing countries export primary commodities and manufactured goods characterized by labor-intensiveness, volatility, price-sensitivity and high substitutability; hence overvalued currency results in direct price competitiveness loss than developed countries that export capital-intensive and differentiated products. Thus, depreciation of real exchange rate affects

developing countries more than developed countries, while high capital rent(real interest rate) affects developed countries more than developing countries(UNCTAD,2000).

Primary commodity prices show decreasing secular trend over the long run compared to manufactured goods causing the terms of trade of primary-product-based economies to deteriorate(Prebisch–Singer Hypothesis); despite the recent boom in commodity prices, the trend is not reversed still now (Ocampo and Parra, 2006 & 2008 and UN WESS, 2006).

2.2.5 Document Review

Real effective exchange rate is an important factor in determining the competitiveness of international trade of a country. As per NBE Quarter Bulletin of 2014/15, both nominal and real effective exchange rates are appreciating substantially which were attributed to domestic inflation and continual depreciation of tradingpartner'snominal exchange rates.

Likewise, the IMF figured out the local currency of Ethiopia is overvalued as the Consumer Price Index based real effective exchange rate has been appreciated by 21 percent through June 2015 year-on-year basis. While, the nominal exchange rate was depreciating on average by 6 percent year-on-year basis. In addition to these, the differential inflation in relation to trading partners continued to be positive. Eventually, export competitiveness has been negatively affected (IMF, September 2015).

The WBG also find out the Ethiopian Birr is overvalued. The report figured out both the positive and negatives impact of depreciation of real exchange rate on export growth and its macroeconomic repercussions. The report based on empirical analysis figured out that a 10 percent depreciation of real exchange rate could results in a 5 percent export growth and a 2

percent overall economic growth. However, since Ethiopia's export items are dominated by agricultural commodities that do not compete on quality but rather on price, depreciation would be mainly accompanied by import prices increase that end up in high inflation unless and otherwise followed by appropriate macroeconomic policy mix adjustment (WBG, June 2014).

3. ANALYSIS AND FINDINGS

3.1 Ethiopian Exchange Rates and Exchange Rate Regimes

The table below indicates that the exchange rate regimes changed with the government changes and overall economic policy. In addition, government changes accompanied by large exchange rate devaluation. For instance, while Imperial market oriented economic system changed by socialist command economic system, exchange rate revalued from 2.4 ETB/USD to 2.07 ETB/USD. However, during state led development economic system, exchange rate devalued largely from 2.07 ETB/USD to 2.8 ETB/USD initially and then to 5.0 ETB/USD during transition period of 1991. By 2014, the exchange rate depreciated to the extent of 20.1 ETB/USD.

According to the IMF classification of exchange rate arrangements, Ethiopian exchange rate regimes fall on conventional fixed peg arrangements and managed floating with no predetermined path for the exchange rate. These two exchange rate regimes have been under three government regimes which have different economic policies.

The imperial regime (1930-1974) was market economy system but the exchange rate policy was fixed pegged against USD. The socialist government regime (1974-1991) devalued currency almost by one fold despite exchange rate policy remained fixed pegged against USD after devaluations.

The current ruling government regimes (1991-present) which follow state led socio-economic development policy devalued exchange rate many times abruptly. The exchange rate regime has been called formally managed floating with no predetermined path for the exchange rate despite it looks like fixed pegged against USD by de facto. This is because the depreciation rate against USD and other major hard currencies is marginal except some significant devaluation times over the past two decades.

Table-1: Ethiopian Exchange Rate by Period, Regime, Economic Policy

Period	Currency Unit	Exchange Rate	Exchange Rate Regime	Over All Economic Policy
1930-1971	ETB/USD	2.4000	Fixed Pegged Against USD	Imperial Market Oriented Economic System
1972-1973	ETB/USD	2.3000 and 2.0987	Fixed Pegged Against USD But Devalued Many Times	Government Transition Period
1974-1991	ETB/USD	2.07	Fixed Pegged Against USD But Devalued	Socialist Command Economic System
1992-1993	ETB/USD	2.8025 and 5.0000	Fixed Pegged Against USD But Devalued Largely	Government Transition Period
1991-2014	ETB/USD	5.4650-20.0956	Managed Floating But Devalued Many Times	State Led Development Economic System

Source: IMF, WB, and NBE, 2015

3.2 Overview of Ethiopian International Trade

3.2.1 Trend of Effective Exchange Rate

The effective exchange rates trend shows that local currency value is decreasing year after year while that of trading partners is increasing. Close examination of the Ethiopia's trading partners' export and import items tells Ethiopia is importing high value goods while exporting mainly low value unprocessed agricultural commodities.

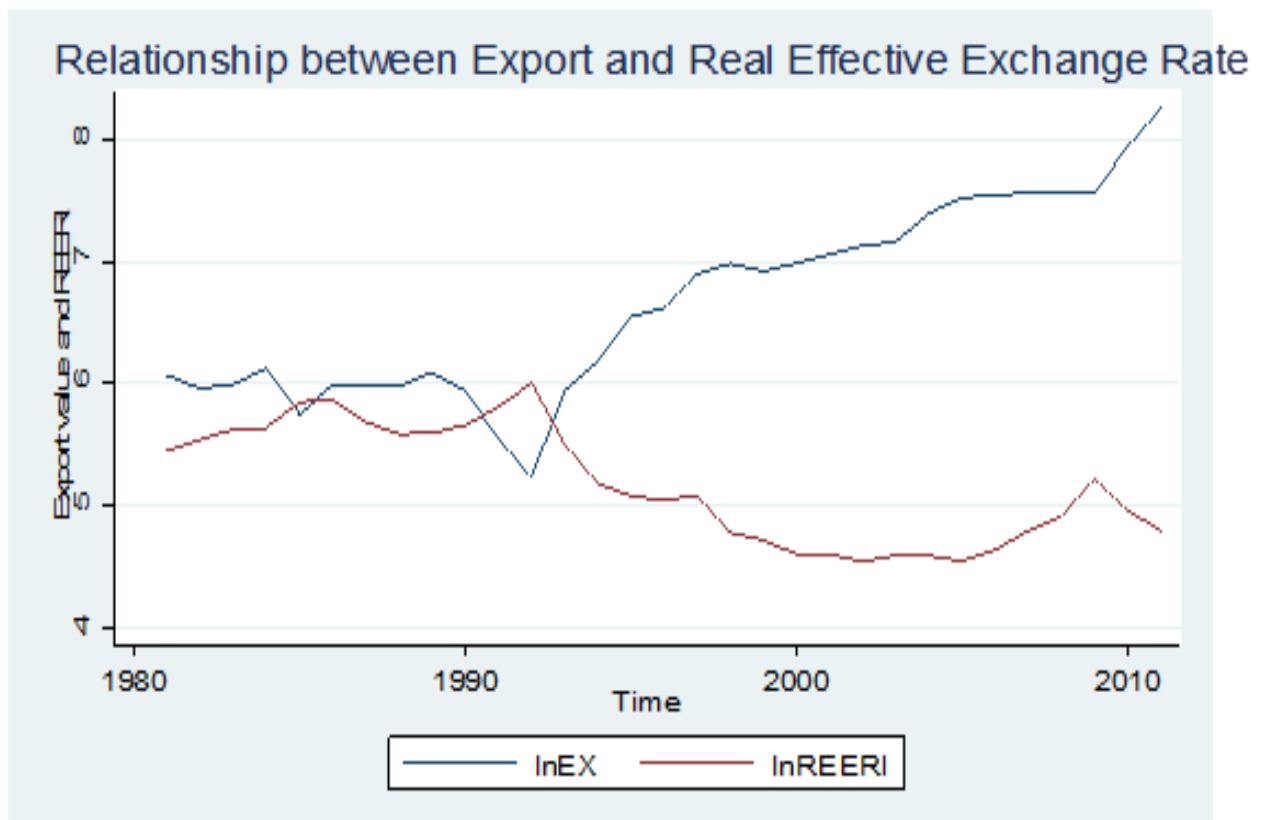
Table-2: Effective Exchange Rate Trends

S.No.	Types of Effective Exchange Rates Indexes	2013/14	2014/15	% Change
1.	Nominal Effective Exchange Rate Index (NEERI)	40.7	42.3	4.03
2.	Real Effective Exchange Rate Index (REERI)	140.8	157.6	11.92

Source: NBE, 2015

Graph 3 below shows that until 1992 the export value and real effective exchange rate were moving hand in hand. After then, the local currency started depreciating, divergence has been occurred. All those tell us the local currency was highly overvalued. When the currency substantial devalued, export values started growing largely.

Graph-1: Relationship between Export and Real Effective Exchange Rate



3.2.2 Major Export Items Production and Productivities

The total production and productivity of Ethiopia's major export items are very far from its world competitors in order to compete in prices by depreciating its domestic currency. The table below shows that its competitors produce higher amounts and are more productive than Ethiopia. The implication is that Ethiopia is unable to produce more quantity either through extensive farming by cultivating more land or through intensive mechanism by increasing productivity,

Table-3: Production and Productivity Comparison of Major Export Items

Major Export Item	Ethiopian Production in Tonnes	Top #1 Country Production in Tonnes	Production Difference in %	Ethiopia n Yield in Hg/Ha	Top Country Yield in Hg/Ha	Productivity Difference in %
Coffee, Green	270,000	2,964,538 (Brazil)	997.98	5,192	29,255 (Malaysia)	463.46
Pulse, Total	2,784,100	18,311,200 (India)	557.70	16,288	180,769 (Bahrain)	1009.82
Oilcrop Primary	271,165	33,288,542 (Indonesia)	12176.12	2,922	45,323 (Malaysia)	1451.09

Source: FAOSTAT, 2013

3.2.3 External Debt and Exchange Rate Depreciation

Ethiopia has external debt denominated in foreign currencies. Despite exchange rate depreciation boosts export values by making Ethiopian export items price competitive, its negative consequence of external debt service is automatic and total debt and debt service increase to the extent of depreciated units of currency.

Table-4: Total External Debt

Year	Total External Debt (current US\$)	% Growth
2010	\$183,712,000	78.03
2011	\$352,569,000	91.91
2012	\$431,289,000	22.33
2013	\$664,230,000	54.01

Source: <http://www.indexmundi.com>

The tables above and below clearly shows that both the total debt and debt services are increasing. Hence, thorough understanding of the fruits of exchange rate depreciations gained in the form of export value growth and the offsets by debt service and total debt increase is critical.

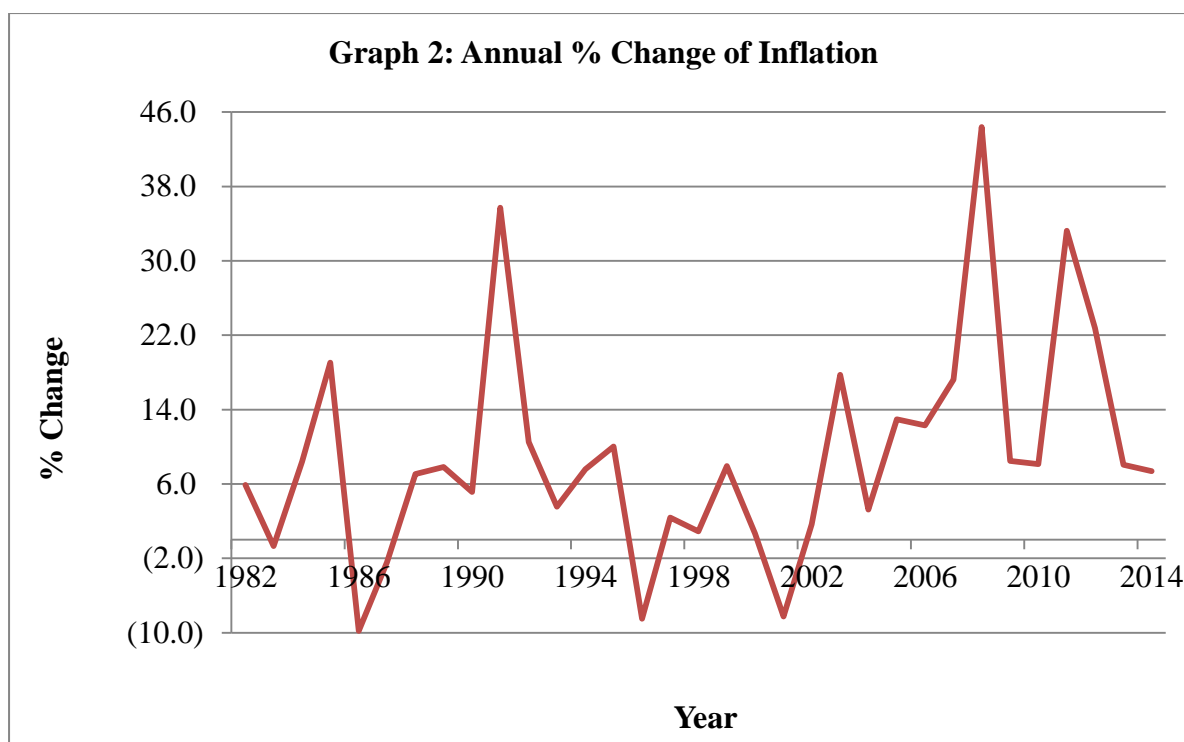
Table-5: External Debt to GDP

Year	External Debt /GDP (%)
2012/13	20.3
2013/14	22.1

Source: IMF, 2015

3.2.4 Inflation and Exchange Rate Depreciation

The inflation growth figures below in Graph 2 clearly show that inflation has strong correlation with exchange depreciations. During the years, exchange rate was substantially depreciated and inflation has been shooting simultaneously.



3.2.5 Price and Income Elasticity of Ethiopian Export

Typical characteristics of Ethiopian export items are agricultural commodities that are less diversified and concentrated on few items. This makes increasing the export values challenging despite the depreciation of nominal exchange rate.

A study made by International Coffee Organization in 2004 found out that majority of coffee drinking developed countries consumption is saturated whereby decrease in price does not result in increase in consumption in the short and medium terms. The study found its effects is mainly in the long run. According to this study, in order to increase consumption in short and medium term boosting cup quality is an important factor.

The table below clearly shows positive correlation between retail price and consumption. This means when price decreases consumption also decreases and vice versa. Being coffee

export is the lion share of Ethiopian export items and Germany is the largest destination countries, competing in prices by depreciating domestic currency may not be well designed strategy in short and medium terms.

Table-6: Correlation between Retail Prices and Coffee Per Capita Consumption in Some Importing Countries

Some Coffee Importing Countries	1965-2003	1965-1979	1980-1989	1990-2003
Austria	0.79	0.76	0.35	0.52
Germany	0.65	0.88	0.17	0.36
Netherlands	0.45	0.27	0.3	0.37

Source: ICO, 2004

Another study made by World Bank Group Africa Region in 2004 with regard to income elasticity concluded that primary products exported from African countries are low income elastic in export destination countries.

**Table-7: Coffee Consumption Per Capita Disappearance for Some Export Destination Countries
(Amount in Kilogram)**

Year	1995	1996	1997	1998	1999	2000	2001	2002	2003
Total	4.52	4.64	4.59	4.64	4.7	4.53	4.56	4.54	4.66
U.S.A.	3.98	4.1	4	4.14	4.24	3.96	4.09	3.95	4.25
European Community	5.35	5.57	5.56	5.53	5.53	5.37	5.29	5.37	5.43
Austria	7.54	8.11	8.17	8.2	8.44	6.57	7.74	7.1	5.64
Belgium/Luxembourg	6.39	6.38	5.69	7.54	5.29	7.32	5.52	9.14	9.61
Denmark	8.7	9.91	8.97	9.57	9.66	8.84	9.66	9.02	8.15
Finland	8.62	10.6	11	11.71	11.43	11.26	11	11.2	11.38
France	5.51	5.72	5.68	5.49	5.7	5.5	5.31	5.54	5.48
Germany	7.37	7.16	7.22	7.01	7.46	6.7	6.9	6.59	6.64

Greece	2.2	4.19	4.31	3.87	3.69	4.27	3.47	5.18	6.01
Ireland	1.78	1.45	1.59	1.49	2.17	1.31	2.29	2.08	2.31
Italy	4.86	4.95	5.08	5.16	5.14	5.36	5.44	5.36	5.7
Netherlands	8.9	9.84	9.19	7.56	5.71	7.21	6.47	6.1	6.9
Portugal	3.82	3.79	3.75	4.3	4.79	4.08	4.47	4.3	4.34
Spain	4.21	4.49	4.63	4.67	5.12	4.6	4.27	4.33	4.21
Sweden	8.17	8.78	8.46	8.47	8.7	8	8.49	8.33	7.96
United Kingdom	2.25	2.43	2.46	2.62	2.27	2.37	2.19	2.25	2.22
Cyprus	3.53	4.14	3.24	3.92	4.32	5.37	4.34	4.48	4.56
Japan	2.98	2.83	2.9	2.91	3	3.17	3.31	3.27	3.21
Norway	9.04	9.77	9.18	9.52	10.56	8.79	9.46	9.13	8.99
Switzerland	7.97	7.82	6.03	6.84	7.25	6.9	6.8	6.78	6.95

Source: ICO, 2004

The figures in tables below also shows coffee per capita consumptions and consumption per capita disappearance in majority of export destination countries of Ethiopia and other exporting countries are large and increasing. This implies that price competitiveness by depreciating domestic currency for primary products are more plausible strategy in order to improve export performance in Ethiopia as they are either their market is saturated or low income elastic.

Table-8: Coffee Per Capita Consumption Changes in Some Importing Countries

Some Coffee Importing Countries	Changes in Per Capita Consumption from 1990-93 and 2000-03 in %
Austria	-31.73
Denmark	-15.31
Finland	-10.33
France	-4.92
Germany	-12.52
Netherlands	-32.59
Norway	-10.97

Sweden	-27.89
Switzerland	-16.06
United Kingdom	-10.51
U.S.A.	-8.35

Source: ICO, 2004

3.2.6 Overview of Export and Import

Generally, the majority share of Ethiopia's export items are agricultural raw materials destined to Asia, Europe, Africa and America. Whereas, the lion share of import items are capital goods, input materials and necessity goods such as food and beverages as well as clothing.

3.2.7 Export Items Composition

The table below indicates that composition of export items of Ethiopia largely dominated by raw agricultural items which consist of 75% and minerals shares 14%. However, manufactured items composed of only 7% while other items held 4%.

Table-9: Export Items compositions and Their Percentage Shares as of 30 June 2014

S.N	Item	Export Values in '000 ETB	% Share
1	Coffee	13,708,114	22.0
2	Oilseeds	12,477,209	20.0
3	Gold	8,722,191	14.0
4	Chat	5,670,686	9.1
5	Pulses	4,790,443	7.7
6	Flower	3,817,384	6.1
7	Live Animals	3,553,276	5.7
8	Leather and Leather products	2,474,650	4.0
9	Textile & Textile Products	2,100,917	3.4

10	Meat Products	1,424,014	2.3
11	Fruits & Vegetables	877,215	1.4
12	Bee's Wax	52,046	0.1
13	Others	2,574,855	4.1
	Total	62,242,999	100.0

Source: Annual Report of National Bank of Ethiopia 2013/14

3.2.8 Export Destination Countries

China and Middle East are the largest export destination of Ethiopia being taking up about 24% of total values of export as of 30 June 2014. Europe, mainly Netherlands, Germany, Italy and France shared around 15%, while around 61% is destined to Africa, and the rest of the world.

Table-10: Export Destination Countries and Their Percentage Shares as of 30 June 2014

S.N	Country	Export Values in 000 ETB	Percentage Shares
1	China, P.Rep.	7,588,195	12.2
2	Netherlands	3,733,608	6.0
3	Djibouti	3,657,884	5.9
4	Germany	3,578,888	5.7
5	Saudi Arabia	3,516,771	5.7
6	U.S.A.	2,528,811	4.1
7	Sudan	1,550,096	2.5
8	U.A.R	1,505,223	2.4
9	Japan	1,304,904	2.1
10	Italy	1,193,640	1.9
11	U.K.	1,034,641	1.7
12	France	685,633	1.1
13	Kenya	383,110	0.6
14	Russia	382,323	0.6

15	Rest of the World	29,599,272	47.6
	Total Export	62,242,999	100.0

Source: Annual Report of National Bank of Ethiopia 2013/14

3.2.9 Import Items Compositions and Import Content of Export

Ethiopian import items mainly consist of capital goods, necessity goods such as food and beverage and clothing items, input materials for agricultural, industry and service sectors. Input materials took 39.5% and capital goods held 24% of total import items as of 30 June 2014. Foods and Beverages were 10.6% and clothing held 3.5% while other items were 22.5%.

Table-11: Import Items compositions and Their Percentage Shares as of 30 June 2014

S.N	Import Items	Import Value in '000 ETB	Percentage Shares
1	Machinery & Aircraft	28,035,377	13.6
2	Petroleum Products	26,565,255	12.8
3	Metal & Metal Manufactured	21,688,480	10.5
4	Road Motor Vehicles	20,493,273	9.9
5	Electrical Materials	11,912,689	5.8
6	Food & Live Animals	11,635,650	5.6
7	Grain	9,865,215	4.8
8	Medical & Pharm. Prod	7,169,253	3.5
9	Fertilizers	5,332,244	2.6
10	Clothing's	4,449,522	2.2
11	Rubber Products	4,030,338	1.9
12	Textiles	2,744,224	1.3
13	Chemicals	2,092,402	1.0
14	Paper & Paper Manufactured	2,064,095	1.0
15	Soap & Polish	907,442	0.4

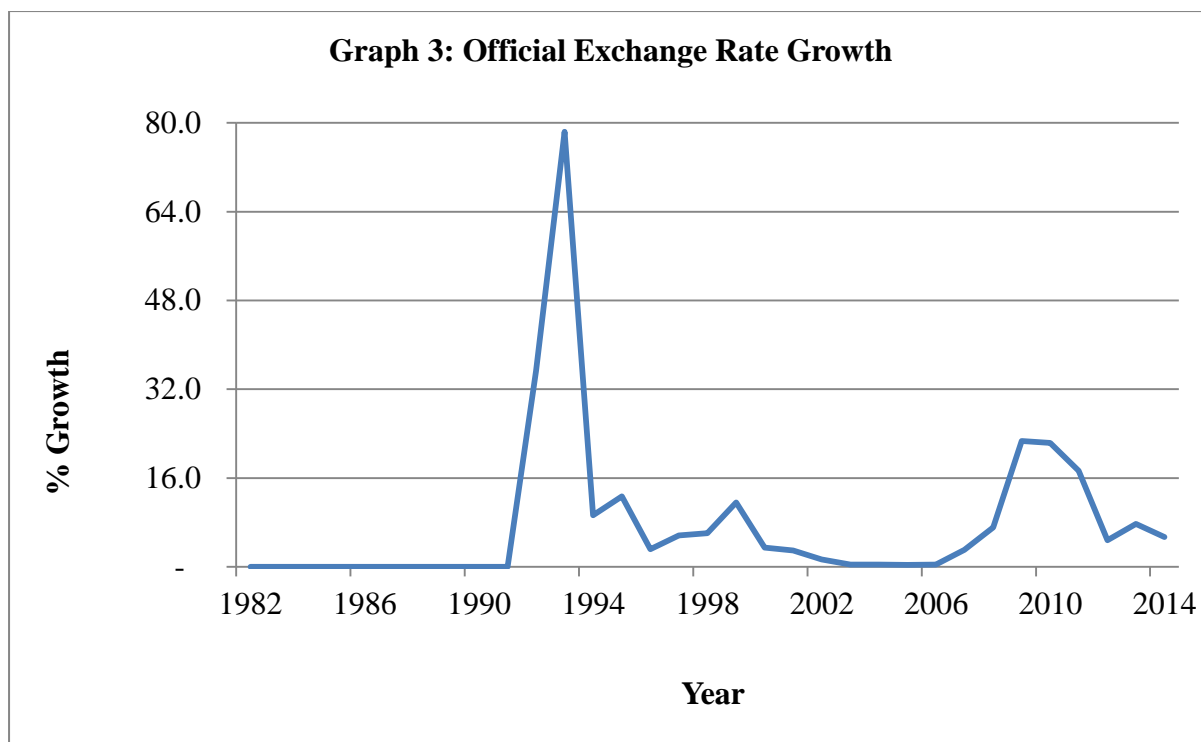
16	Glass & Glass Ware	722,828	0.3
17	Beverages	261,691	0.1
18	Tobacco	193,101	0.1
19	Telecommunication Apparatus	96,583	0.0
20	Others	46,476,571	22.5
	Total	206,736,233	100.0

Source: Annual Report of National Bank of Ethiopia 2013/14

It is challenging or marginal to improve export values by depreciating local currency as majority of import items is not easily substitutable capital goods and larger portion of them have high domestic demand but low domestic supply like food and other basic necessity items. Besides, the lion shares of import (39.5%) are input materials that are mainly import content of the export. Depreciating exchange rates automatically increase the costs of these raw materials which offset the price competitiveness gained in depreciating local currency.

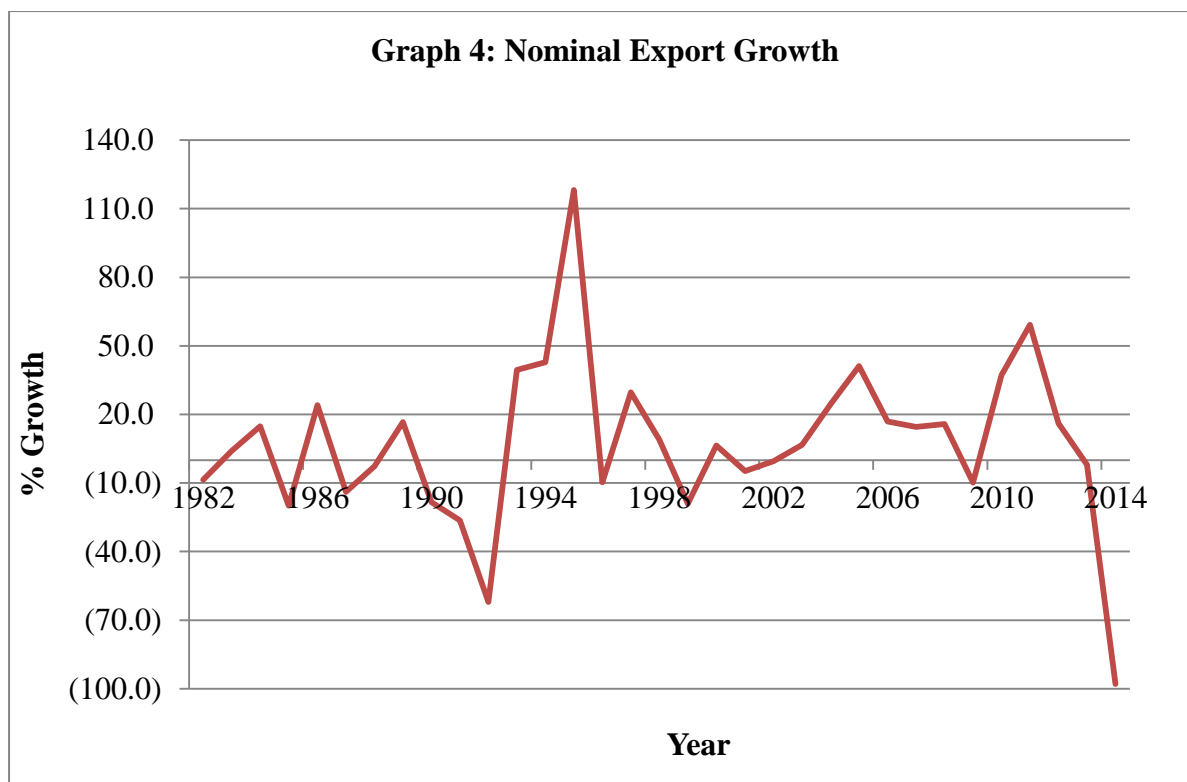
3.2.10 Exchange Rate and Export Values Trend

The Graph 3 below depicts that Ethiopian local currency shoot from year 1990 to 1994 as the government devaluated the LCU unit following overall economic policy from command socialist system to partially controlled free market economy system. The official exchange rate growth slowed down then-after. From 2006 to 2014 being peak at 2010, the rate was depreciated highly in order to curve the overvalued currency as the country's external sector grew by double digit year after year.



The above Graph 2 and Graph 3 below exchange Rate growth trend depicts before 1991 export values is almost constant because during these periods nominal exchange rate was fixed around 2.07 ETB/USD and started to decline sharply after 1991 and then-after begin to rise up when nominal currency was depreciated substantial in 1992 and afterwards many times and latest in 2010.

Thus, the exchange rate growth trend and export values shoot matches. Besides, when exchange rate growth declines, export did so more or less. Nerveless, it seems it is short run phenomena.



4. POLICY RECOMMODATIONS

Local currency depreciations automatically increase external debt service and amount of the country to the extent of depreciated units. External debt management policy which is part of the fiscal policy and exchange rate stability which is part of monetary policy work hand in hand in order to manage the macrocosmic repercussions of foreign exchange rate depreciations.

Domestic currency depreciations does not necessarily discourage imported goods in developing countries like Ethiopia due to the fact that imported items are either capital goods or necessity goods which is difficult to substitute domestically since either not produced locally or have excess demand. In addition, encouraging import substitution is difficulty as large amount of imported items are raw materials used for production export

items as inputs. Strategy and policy to solve supply-side problems of necessity goods and import substitution of small and medium size capital goods have to be dealt with carefully.

Majority of export items are income and demand inelastic agricultural commodities. For instance coffee, being the single major export item of Ethiopia, its consumption has been saturated in traditionally consuming export destinations countries. Hence, diversifying export items and destinations should be key strategy and policy areas to assess in order to boost export performance of the country.

Major export items total production and productivity is by far below the competitor countries. In order to bring cutting-edge in international competitiveness and enhance export performance, designing appropriate strategy and policy to increase total production and productivity of the country has paramount importance in the long run. However, while depreciating the local currency vis-à-vis foreign currencies in order to increase export values in short run, in-depth examination of its macroeconomic repercussions on external debt, inflation, capital and necessity goods supply shortages are critical areas.

REFERENCES

1. "Bloomberg Business." bloomberg.Com. Accessed February 26, 2016. <http://www.bloomberg.com/>.
2. "dataworldbank.org." Dataworldbank.Org. Accessed February 26, 2016. <http://www.dataworldbank.org/>.
3. "Documents - Price-Elasticity of Demand and Coffee Consumption in Importing Countries." International Coffee Organization -. Accessed February 26, 2016. http://www.ico.org/show_document.asp?id=231.
4. "Global Economy, World Economy | Theglobaleconomy.Com." Theglobaleconomy.Com. Accessed February 26, 2016. <http://www.theglobaleconomy.com/>.
5. "IMF -- International Monetary Fund Home Page." IMF -- International Monetary Fund Home Page. Accessed February 26, 2016. <http://www.imf.org/>.
6. "National Bank Of Ethiopia - Nbebank.Com." National Bank of Ethiopia - Nbebank.Com. Accessed February 26, 2016. <http://www.nbe.gov.et/>.
7. "Register Now For the 4th World Coffee Conference." International Coffee Organization. Accessed February 26, 2016. <http://www.ico.org/>
8. "Unctad.Org | Home." Unctad.Org | Home. Accessed February 26, 2016. <http://unctad.org/>.
9. 2015 Article IV Consultation—Press Release; Staff Report; and Statement by the Executive Director for the Federal Democratic Republic of Ethiopia. Publication No. IMF Country Report No. 15/300. Washington, D.C.: International Monetary Fund, September 2015.
10. 3rd Ethiopia Economic Update: Strengthening Export Performance through Improved Competitiveness. Publication No. 89548. World Bank Group, 2014.
11. Agasha Nimrod. "Determinants of Export Growth in Uganda (1987-2006)." Master's Thesis, Kampala/Makerere University, 2009.

12. Annual Report of National Bank of Ethiopia. Report. Accessed January 12, 2015.
www.nbe.gov.et.
13. Asmerom Kidane. Indices of Effective Exchange Rates: A Comparative Study of Ethiopia, Kenya and The Sudan. African Economic Research Consortium. March 28, 1995. Accessed February 25, 2016. www.opendocs.ids.ac.uk.
14. Berhanu Lakew. Prospects for Export Diversification in Ethiopia. National Bank of Ethiopia Economic Research Department. May 2003. Accessed February 25, 2016.
www.nbe.gov.et.
15. Borena, Desalgne Lencho. "Response of Export to Exchange Rate Movement in Ethiopia." Birritu, August 16, 2010, 5-12.
16. Borena, Dessalegn Lencho. "Response of Export to Exchange Rate Movement In Ethiopia." Birritu, 5-19.
17. Borena, Dessalegn Lencho. "The Effect of Exchange Rate Movement on Trade Balance In Ethiopia." Master's Thesis, University of Tokyo, 2013.
18. Borena, Dessalegn Lencho. THE Effect of Exchange Rate Movement on Trade Balance in Ethiopia. Master's Thesis, University of Tokyo, July 2013.
19. Caroline Freund, And Martha Denisse Pierola. "Export Surges." Journal of Development Economics, 2011. Accessed February 26, 2016.
www.elsevier.com/locate/devec.
20. Cheung, Yin-Wong, and Rajeswari Sengupta. "Impact of Exchange Rate Movements on Exports: An Analysis of Indian Non-Financial Sector Firms." SSRN Electronic Journal SSRN Journal.
21. Feenstra, Robert C., and Alan M. Taylor. International Macroeconomics. New York: Worth Publishers, 2012.
22. Growth and Transformation Plan 2010/11-2014/15. Publication. Vol. 2. Policy Matrix. Addis Ababa: Federal Democratic Republic of Ethiopia Ministry of Finance and Economic Development, November 2010.
<http://www.nbe.gov.et/publications/quarterlybulletin.html>.

23. Ibrahim Ngouhouo, Ph.D, And Alex Audrin Makolle. "Analyzing the Determinants of Export Trade In Cameroon (1970 – 2008)." *Mediterranean Journal of Social Sciences* 4, No. 1 (January 2013). <https://www.kdischool.ac.kr>.
24. In, Francis, And Pasquale Sgro. "Export Growth and Its Determinants: Some Evidence for South Korea and Singapore." *Applied Economics Letters* 5, No. 4 (1998): 225-30.
25. Kristian Nilsson, And Lars Nilsson. *Exchange Rate Regimes and Export Performance of Developing Countries*. Oxford: Blackwell Publishers, 2000.
26. Krugman, Paul R., Maurice Obstfeld, and Marc J. Melitz. *International Economics: Theory & Policy*. Boston: Pearson Education, 2012.
27. Mariana Colacelli. American Economic Association Conference Program. Columbia University. Export Responses To Real Exchange Rate Fluctuations: Development Status And Exported Good Effects. December 2008. Accessed February 11, 2016. www.aeaweb.org.
28. Melesse, Wondemhunegn Ezezew. *The Dynamics between Real Exchange Rate Movements and Trends In Trade Performance: The Case Of Ethiopia*. Master's Thesis, March 2011. Munich Personal Repec Archive, March 2011.
29. Muhammad Nadeem, Muhammad Azam, and Rabiul Islam. "An Investigation Of The Various Factors Influence On Exports." *Global Journal Of Management And Business Research*, 1.0st Ser., 12, No. 19 (2012).
30. National Bank of Ethiopia Quarterly Bulletin Quarter 4. Report. Vol. 32. Addis Ababa: National Bank Of Ethiopia, 2014/15.
<http://Www.Nbe.Gov.Et/Publications/Quarterlybulletin.Html>
31. National Bank of Ethiopia Quarterly Bulletin Quarter 4. Report. Vol. 32. Addis Ababa: National Bank of Ethiopia, 2014/15.
32. Ocampo, José Antonio, and Mariángela Parra-Lancourt. "The Terms of Trade for Commodities sincethe Mid-19th Century." *RHE / JILAEH Revista De Historia Económica / Journal of Iberian and Latin American Economic History* 28, No. 01 (2010): 11.

33. Patterns of Africa-Asia Trade and Investment Potential for Ownership and Partnership. Publication No. 33666. Vol. 1. Tokyo: World Bank Group Africa Region, Private Sector Unit, 2004.
34. Sisay Menji. Export Performance and Determinants in Ethiopia. Master's Thesis, Addis Ababa, Ethiopia, May 2010. Munich Personal Repec Archive, March 2011.
35. Trade and Development Report, Global Economic Growth and Imbalances. Publication. New York and Geneva: United Nations Conference on Trade and Development, 2000.
36. Trade and Development Report, New Features of Global Interdependence. Publication. New York and Geneva: United Nations Conference on Trade and Development, 2005.